

United States Department of Agriculture

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National Soil Dynamics Laboratory

Conservation Systems Research

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Conservation Systems Research

Determining Economic Incentives for the Conservation Security Program

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Conservation practices include (clockwise from top left) high-residue conservation tillage, crop rotations, wind barriers & filter strips, and prescribed grazing.

Researchers

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The Challenge

The Conservation Security Program (CSP) is a voluntary program of the USDA Natural Resources Conservation Service (NRCS) that pays farmers to maintain and enhance conservation practices on their land. These farmers must meet prescribed guidelines established by the NRCS that address soil and water quality. The CSP offers payments for practices including appropriate land usage and the adoption, maintenance, and improvement of existing conservation practices.

A unique aspect of this program is its intention to recognize farmers who already utilize good conservation practices, and to motivate them and others to do the same or better. To achieve this goal, which has been summarized in the slogan, *Reward the Best, Motivate the Rest*, NRCS has established three *tiers* of conservation practice adoption. Incentive payments to farmers increase with the amount and/or quality of practices that have been adopted. With Tier 1, the maximum allotment is \$20,000 per year, while with Tier 3, the maximum annual allotment is \$45,000.

The challenge of this project is to determine the monetary rewards necessary to motivate adoption by farmers, and the benefits society gains from this adoption. Specifically, we want to answer two questions:

- 1. What types of incentives are necessary to get farmers who are already using conservation practices to do even more?
- 2. What level of incentive is needed to encourage farmers who are not using conservation practices to begin doing so?



Grassed waterways are another qualifying conservation practice.

The Study

The objectives of this study are to:

- Determine the monetary amount of enhancement payments required to induce farmers to intensify their management of a variety of soil and water conservation practices.
- Determine if the tier system motivates farmers to increase the amount of land under conservation systems and adopt additional conservation practices.
- Identify the economic and sociological factors that affect a farmer's decision to enter into a particular contract under the CSP, including the conservation practices adopted, resource issues addressed, and level of management intensity.

In 2005 a pilot survey will be conducted in four northern Alabama watersheds to:

- a. Determine viable enhancement payment levels and delivery mechanisms for farmers participating in the CSP.
- b. Examine the adoption of new conservation practices and activities that intensify present conservation practices being undertaken by farmers.
- c. Examine any economic and sociological factors that may affect a farmer's decision to participate in the CSP.

The survey will include both large- and limited-resource farmers who might qualify for the CSP. All surveys will be conducted by mail with assistance from the Alabama Agricultural Statistics Service and will include demographics, financial characteristics, conservation practices used, farm characteristics and practices, and farmers' attitudes toward the CSP. Information from this survey will help determine the needed payment levels to induce farmers to participate in the program.

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In 2006 a second survey will be conducted in the Wheeler Lake Watershed in northern Alabama and one other priority watershed chosen for participation in the CSP. This survey will examine:

- a. The socio-economic impact of the CSP on its participants.
- b. The effectiveness of the CSP in motivating farmers to intensify conservation management practices.
- c. Any changes identified by participants for improving program implementation in future priority watersheds.

The survey will be conducted by the researchers and graduate students through on-site interviews with farmers who have and would potentially qualify for the CSP in future years. The survey tool will be more intensive than the first one and will focus on the economic and sociological aspects of program adoption and implementation. Information obtained from this survey will provide guidance for future implementation and operation of the CSP throughout the southeastern USA.

